

A list of the intertidal opisthobranchs of Harmers Haven, South Gippsland

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Abstract

Over a period of 12 years, records have been kept of the molluscs, including opisthobranchs, seen during surveys at Harmers Haven, Victoria. An annotated list of the sixty-four opisthobranch species recorded to date is presented, with selected images. (*The Victorian Naturalist* 127 (6), 2010, 248–254)

Keywords: opisthobranchia, Harmers Haven, sea slugs, littoral, Bunurong Marine Reserve

Harmers Haven is a small coastal locality about 6 km south of Wonthaggi, South Gippsland, Victoria, adjacent to the western end of the Bunurong Coastal Reserve. A rocky reef lies along the shore providing some protection from the swells and occasional storms from Bass Strait.

Opisthobranchs belong to the Phylum Mollusca, Class Gastropoda. Surveys of the intertidal reef began in 1997 with one survey each year until 2001. More regular surveys have been undertaken recently, particularly since 2005, covering from the high to the low intertidal zones but predominantly the mid-intertidal zone due to accessibility. The areas surveyed are approximately 8 km south-east of the outlet pipe of the desalination plant currently being constructed. For various reasons, such as tide height, tide time, and weather, some surveys have been of much shorter duration than others.

The habitat surveyed is another variable. A number of species are very habitat specific. If various species of the green alga *Caulerpa* are not examined then *Edentellina typica* or *Midorogai australis* will not be found. *Ascobulla fischeri* has been found only in the sand at the base of *Caulerpa brownii*. The sea grass *Amphibolis antarctica* hosts another opisthobranch community. Many of the nudibranch species are found hiding under rocks or crawling on algae.

It should also be noted that initially very few, if any, opisthobranchs could be identified with confidence, but as knowledge has increased so has the ability to find and identify many of the more common species. New records are constantly being added. The current number of species recorded is 64. Many species have been

found only once, the majority between two and six times with a few species, as noted below, often encountered.

The unnamed species have been given the numbers allocated by Burn (2006). An asterisk indicates additional species recorded by the FNCV Marine Research Group.

Acknowledgements

I am greatly indebted to Robert Burn for confirming names for the species that have been found. Without his continuing assistance most species would have remained nameless. His advice on habitats and differentiating characteristics has been invaluable. The members of the FNCV Marine Research Group have been most helpful. Leon Altoff and Audrey Falconer forwarded Harmers Haven data gathered by MRG members. Images and input from Platon Vafiadis have also assisted in identification.

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Appendix 1. List of unertidal opisthobranchs

ORDER CEPHALASPIDEA

Family Cylichnidae

Tornatina sp. 1

An unnamed species with opaque white blotches in the white shell. Common.

Tornatina sp.

An unnamed species with a translucent, broadly domed protoconch. Rare.

Family Philinidae

Philine sp. 1

An unnamed small orange species.

Philine sp. 2

An unnamed even smaller white species with minute white spots (Fig. 1).

Family Aglajidae

Melanochlamys queritor (Burn, 1957)

Noalda exigua (Hedley, 1912)

Family Haminoeidae

Haminoea maugeansis Burn, 1966

A small bubble shell commonly found in intertidal rock pool algae.

Family Diaphanidae

Colpodaspis sp. 2

An unnamed tiny dark brown species.

Diaphana tasmanica (Beddome, 1883)

This rare species has been located a number of times recently. It has been recorded between November and April in rock pool algae (Fig. 2).

Family Runcinidae

Runcina australis Burn, 1963

Runcina sp. 1

An unnamed minute dark species with posterior external shell.

Family Ilbiidae

Ilbia ilbi Burn, 1963

An inhabitant of rock pool algae where it is quite common in summer and autumn.



Fig. 1. *Philine* sp. 2 – 4 mm in length.



Fig. 2. *Diaphana tasmanica* - shell 1.5 mm in length.

ORDER SACOGLOSSA

Family Volvatellidae

Ascobulla fischeri (A. Adams & Angas, 1864)

Family Oxynoidae

Oxynoe viridis (Pease, 1861)

Roburnella wilsoni (Tate, 1889)

Family Juliidae

Edentellina typica Gatliff & Gabriel, 1911

From about November to May this bivalved gastropod species is common on *Caulerpa brownii*.

Midorigai australis Burn, 1960

Common in late summer and autumn but less frequent than the previous species.

Tamanovalva babai Burn, 1965

This species is the least common of the bivalved gastropods intertidally.

Family Plakobranchidae

Elysia coodgensis Angas, 1864

A small species that can be found all year.

Elysia furvacauda Burn, 1958

A red-brown species with minute white, yellow and blue dots. Appears to be reasonably common from January to April.

Elysia maoria Powell, 1937

Elysia sp. 1

An unnamed brown species with a pair of tongue-like lobes projecting from each parapodial margin. Common and appears to be present all year.

Elysia sp. 3

An unnamed greenish species.

Family Caliphyllidae

Polybranchia pallens (Burn, 1957)

Not common but easily overlooked due to the camouflage of its leafy cerata.

Family Limapontiidae

Ercolania sp. 4

An unnamed black species with red ceratal tips and white stripe to each rhinophore.

Hermaea sp. 2

An unnamed reddish-brown species.

Placida dendritica (Alder & Hancock, 1843)

This species can often be found if the host alga *Codium fragile* is located.

Placida sp.

An unnamed species that is smaller and lighter in colour than the preceding species.

Stiliger smaragdinus Baba, 1949

An uncommon green species with rounded cerata associated with and closely resembling *Caulerpa vesiculifera* (Fig. 3).



Fig. 3. *Stiliger smaragdinus* – 35 mm.

ORDER ANASPIDEA

Family Aplysiidae

Aplysia parvula Guilding in Mörch, 1863

A sea hare with dark edges to the parapodia. Found occasionally.

Aplysia sydneyensis Sowerby, 1869 *

ORDER PLEUROBRANCHIDA

Family Pleurobranchidae

Berthella medietas Burn, 1962

A common, pale coloured side-gilled slug under rocks at mid-tide level and below.

Berthella serenitas Burn, 1962

Much less common than *B. medietas*.

ORDER NUDIBRANCHIA

Family Polyceridae

Polycera janjukia Burn, 1962

Family Aegiridae

Aegires exeches Fahey & Gosliner, 2004

Family Dendrodorididae

Doriopsilla carneola (Angas, 1864)

This is a common intertidal species found under rocks. Colour varies from white through shades of yellow to deep orange.

Family Actinocyclusidae

Hallaxa michaeli Gosliner & Johnson, 1994

Family Chromodorididae

Ceratosoma brevicaudatum Abraham, 1876

An attractive brightly coloured species up to 100 mm in length.

Chromodoris epicuria (Basedow & Hedley, 1905)

Noumea haliclona (Burn, 1957)

Family Dorididae

Doris cameroni (Allan, 1947)

A common dull yellow species with dark spots in the top of the nodules on the mantle.

Family Discodorididae

Hoplodoris nodulosa (Angas, 1864)

Jorunna hartleyi (Burn, 1958) (Fig. 4).

Jorunna cf. *pantherina* (Angas, 1864)

Jorunna sp. 1

An unnamed white species with black spots.

Paradoris dubia (Bergh, 1904)

Platydorid galbana Burn, 1958

This species is listed under the *Flora and Fauna Guarantee Act, 1988*. It has been found only once, on the underside of a low intertidal rock.

Trippa albata Burn, 1962

Sclerodoris tarka Burn, 1969

Family Tethydidae

Melibe australis (Angas, 1864)

Melibe maugeana Burn, 1960

Family Zephyrinidae

Caldukia affinis (Burn, 1958)

Family Madrellidae

Madrella sanguinea (Angas, 1864)

Only small patches of the bryozoan, *Mucropetraliella elleri*, on which this bright orange-red species feeds, seem to occur in the area, but the nudibranch has been recorded four times.

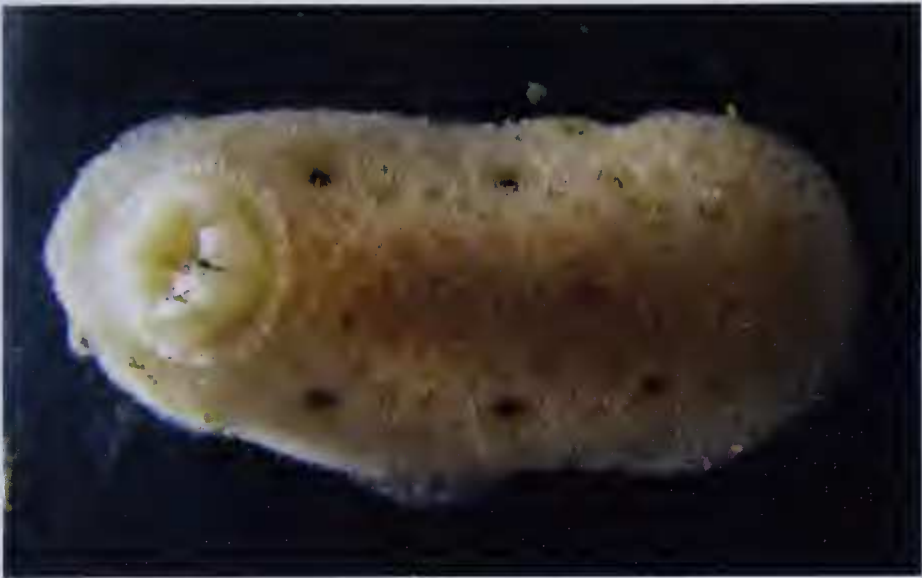


Fig. 4. *Jorunna hartleyi* – 25 mm.

Family Flabellinidae

Flabellina poenicia (Burn, 1957)

Flabellina sp. 2

An unnamed purple species with orange cerata.

Family Aeolidiidae

Anteaeolidiella foulisi (Angas, 1864)

Spurilla macleayi (Angas, 1864)

The most commonly encountered species in the intertidal zone. It hides under rocks but juveniles are sometimes found on seaweed. It is present all year.

Family Facelinidae

Austraeolis ornata (Angas, 1864)

Another species that is frequently found under rocks.

Cratena lineata (Eliot, 1905) (Fig. 5).

Facelina newcombi (Angas, 1864)

Facelina sp. 2

An unnamed pinkish species with yellow rings on cerata.

Palisa sp.

An unnamed pale species with white markings.

Phyllodesmium macphersonae (Burn, 1962)

Phyllodesmium serratum (Baba, 1949)

Family Tergipedidae

Trinchesia sp. 3

An unnamed small fawn species on *Amphibolis antarctica*, sometimes present in large numbers in late summer.



Fig 5. *Cratena lineata* - 7 mm.

One Hundred and One Years Ago

ADDITIONS TO THE FISH FAUNA OF VICTORIA. No. 2.

BY J. A. KERSHAW, F.E.S., National Museum.

(Read before the Field Naturalists' Club of Victoria, 13th Sept., 1909.)

LOPHOTES CRISTATUS, Johnson.

In the early part of last month, Mr. W. H. Baldwin, while riding along the shore about 20 miles east of Apollo Bay, noticed what appeared to be a strange fish floundering about in the shallow water. On dismounting, he found it to be a fish about 4 feet long, with an unusually square-shaped head, surmounted by a long, erect spine, and large and slightly prominent eyes, giving to it a rather fierce appearance.

Being afraid to handle it, for fear, as he explained, of being poisoned, he endeavoured to land it by means of a stockwhip he was carrying. Finding the animal altogether too lively, however, he secured a net, by means of which he succeeded in capturing it without serious injury.

The specimen was forwarded to the National Museum, where it arrived in a perfectly fresh and firm condition, although a week had elapsed since its capture.

It proved to be a fine example of a species of the extremely rare Crested Band-fish, *Lophotes*, five species of which have, so far, been described. Of these *L. cepedianus*, Giorna, and *L. siculus*, Swains., are recorded from the Mediterranean; *L. cristatus*, Johnson, from Madeira; *L. capellei*, Temm. and Schl., from Japan; and *L. jiskei*, Günth., from Cape Colony, South Africa, and New Zealand. Of the species already described, the specimen here dealt with agrees most closely with *L. cristatus*, Johnson,* and I have little hesitation in referring it to that species.

From *The Victorian Naturalist* XXVI, p. 83, November 9, 1909